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**Predicting Black Parents' Attitudes toward Corporal Punishment:
A Moderated-Mediation Model of Frequency and Valence of Childhood Experiences**

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**Predicting Black Parents' Attitudes toward Corporal Punishment:
A Moderated-Mediation Model of Frequency and Valence of Childhood Experiences**

Abstract

Child corporal punishment (CP) may lead to child physical abuse, which is a public health concern in the U.S. The present study examined major risk factors predicting attitudes toward CP among a sample of Black parents ($N = 394$), including frequency and valence of experiences of CP during childhood, outcome expectancies of CP, and perceptions of self-efficacy and response efficacy of non-physical discipline strategies. Structural equation modeling results revealed that the indirect associations between CP frequency and attitudes through self-efficacy and response efficacy were moderated by CP valence. Results extend the literature and point to the need for incorporating information about efficacy of evidence-based non-physical discipline strategies into intervention messages targeting prevention of child physical abuse.

Keywords: adverse childhood experiences; corporal punishment; efficacy; outcome expectancies; child violence prevention

Predicting Black Parents' Attitudes toward Corporal Punishment:

A Moderated-Mediation Model of Frequency and Valence of Childhood Experiences

Corporal punishment (CP) is “the use of physical force with the intention of causing a child to experience pain but not injury for the purposes of correction or control of the child’s behavior” (Straus, 2001, p. 4). Common examples of CP include spanking, kicking, hitting a child with objects, which are likely to escalate to child physical abuse (Afifi et al., 2017; Appleton & Stanley, 2011; Black et al., 2001; Rodriguez et al., 2021). Research also reveals that CP is ineffective in managing child behavior (Durrant & Ensom, 2012; Gershoff et al., 2018) and is associated with an array of poor child outcomes including physical and mental health problems and impaired social-emotional development (Cuartas, 2022; Ferguson, 2013; Gershoff et al., 2012).

Studies have established that childhood experiences of CP are a powerful predictor of parents’ positive attitudes toward using CP to discipline children (Ateah & Durrant, 2005; Duong, 2021; Holden, 2020), which is a mechanism perpetuating the transmission of parental physical aggression across generations, leading to the persistence of this parenting practice across racial groups in the U.S. (Berlin et al., 2011; Niu et al., 2018). Researchers have recommended that changing parents’ attitudes toward CP is an effective way to break this cycle of violence (Gagné et al., 2007; Holden et al., 2014). Several studies have tested CP intervention messages targeting attitudes as a key psychological outcome affecting parents’ intentions to use CP (Chavis et al., 2013; Gershoff et al., 2017; Holden et al., 2014; Reich et al., 2012). However, researchers suggest that more studies are needed to understand the mechanism through which childhood experiences of CP affect attitudes (Finzi-Dottan & Harel, 2014). Moreover, research has found that not all parents experiencing CP during childhood endorse the use of CP to discipline children (Wang et al., 2021), which suggests

the possibility that there may be factors moderating the association between childhood experiences of CP and attitudes toward CP.

Black Parents' Attitudes toward Corporal Punishment

While parents across racial and ethnic groups in the U.S. widely approve of CP with estimates ranging from 65 to 90 percent (Fleckman et al., 2019), research reveals that Black parents report higher rates of CP approval compared to other racial groups (Chiocca, 2017; Klevens et al., 2019; Su et al., 2019). Black parents tend to view CP as a common approach to manage child behavior (Klevens et al., 2019). Moreover, the belief that CP is a necessary and effective child discipline strategy is more common in Black families in contrast to other racial groups (Chiocca, 2017; Mogro-Wilson et al., 2019). Research found that parents who believe that CP is more effective than alternative discipline strategies are more likely to engage in CP (Klevens et al., 2019; Magariño et al., 2021) and less likely to be responsive to others' advice about not using CP (Duong et al., 2022).

Multiple factors, including systemic racism (Su et al., 2019), implicit bias as a reflection of systemic racism (Payne & Hannay, 2021), and religious fundamentalism (Beller et al., 2021) reinforce the idea that CP is necessary for disciplining children in Black communities. CP can be traced back to the slave trade in the U.S. when physical assaults were used to ensure compliance and submission of enslaved people. Parental beliefs in the necessity of CP may have arisen as attempts to protect their children from severe and lethal assaults by enslavers (Thomas & Dettlaff, 2011). Continued structural and systemic racism have perpetuated the use of CP among Black families through experiential belief that CP is instrumental in teaching children obedience necessary for survival (Taylor et al., 2011a; Thomas & Dettlaff, 2011). Black parents may use CP as a tool for compliance and believe that using CP is a way to protect their children from systemic violence including police brutality (Brodsky & DeVet, 2000; Su et al., 2019; Taylor et al., 2011a). Religious

fundamentalism is also associated with Black parents' beliefs of inherent "badness" and "dangerousness" warranting early, harsh and controlling treatment of children (e.g., interpretation of "spare the rod, spoil the child"; Beller et al. 2021; MacKenzie et al. 2011). Thus, examining factors influencing Black parents' attitudes toward CP is necessary to support interventions.

Frequency of Childhood Experiences of Corporal Punishment

Research has consistently found that frequency of CP during childhood (hereafter, CP frequency) is positively associated with positive attitudes toward CP (Holden, 2020; Rodriguez et al., 2020; Straus, 2001; Walker et al., 2018; Widom & Wilson, 2015). That is, the more frequently individuals are physically punished by their caregivers during their childhood, the more likely they are to view CP as a positive disciplinary practice. The social cognitive theory (SCT) suggests that parenting attitudes are learned in a social context and influenced by outcome expectancies (Bandura, 1986). In this perspective, parents' current child discipline behaviors are informed by their past experiences with harsh disciplines implemented by their own parents. During this learning process, parents observe tangible expected outcomes of CP (e.g., their behavioral compliance to their parents' discipline messages) and subsequently develop behavioral expectations that shape their positive attitudes toward CP. Thus, parents who had direct experiences with CP during childhood are likely influenced by their own experiences and expect compliance from their children when they use CP to correct children's misbehaviors (Berlin et al., 2011).

In contrast to CP as one ineffective attempt to correct child misbehavior (Wekerle et al., 2019), multiple non-physical discipline strategies (e.g., timeout or non-punitive reinforcement) have demonstrated effectiveness for managing child behavior (Fortson et al., 2016). However, to adopt non-physical discipline strategies, parents require high self-efficacy, which refers to parents' perceptions of their ability to implement non-physical

discipline tactics (Bandura, 2004; Duong et al., 2021). Simultaneously, parents need to possess a high level of response efficacy, or perception that non-physical discipline strategies will yield desirable outcomes (Duong et al., 2021; Witte, 1992). Parents who frequently experienced CP during childhood may have limited exposure to evidence-based non-physical discipline strategies, few opportunities for learning and practicing effective child behavior management strategies, and hence limited opportunities to form expectations of desirable outcomes of these strategies (Duong et al., 2021; Rodrigues et al., 2018). Black parents tend to perceive that CP has an instrumental role in cultivating a child's respect to authority figures, promoting the child's safety, and gaining behavioral compliance (Taylor et al., 2011a). Moreover, Black parents often cite their past experiences of CP accompanied by positive outcomes as an explanation for their use of CP and perceived non-physical discipline strategies as ineffective at improving child behavior (Duong et al., 2021). In sum, research suggests that parents who were frequently punished with physical discipline during childhood likely develop expectations of CP as an effective parenting approach to manage children, while perceiving a low level of efficacy of non-physical discipline strategies. Thus, we hypothesize:

H1: Participants who report higher CP frequency will also report (a) higher CP outcome expectancies, (b) lower perceptions of self-efficacy of non-physical discipline strategies, and (c) lower perceptions of response efficacy of non-physical discipline strategies.

Predicting Parents' Attitudes toward Corporal Punishment

Studies have established that positive attitudes toward CP are a major risk factor leading to parents' adoption of CP to discipline children (Ateah & Durrant, 2005; Chavis et al., 2013; Duong, 2022; Holden, 2020). According to the Theory of Planned Behavior (TPB, Ajzen, 2011), attitudes are a function of beliefs that reflect people's tendency to respond to a

behavior with favorableness or unfavorableness, which predicts intentions to engage in a behavior (Fishbein, 2008; Fishbein & Ajzen, 2011). Attitudes are shaped by beliefs underpinning a behavior and the degree to which these beliefs are salient, or assessable, to individuals (Ajzen & Fishbein, 2000). Beliefs about harmful or beneficial outcomes of a behavior are influential in shaping how people evaluate a behavior (i.e., outcome expectancies). More specifically, if people expect that performing a behavior will lead to desirable outcomes, they are more likely to view the behavior as positive and beneficial. In turn, their attitudes toward the behavior become more positive (Ajzen & Fishbein, 1980).

Several studies have shown that outcome expectancies of CP are a strong predictor of parents' attitudes toward CP (Gagné et al., 2007; Taylor et al., 2011b; Taylor et al., 2017a). Parents tend to believe that using CP to discipline children will result in desirable outcomes, including reducing unwanted behaviors (Crouch & Behl, 2001; Pinderhughes et al., 2000), preventing dangerous situational threats to children's well-beings (Taylor et al., 2011a), and increasing child behavioral compliance (Holden, 2020). While such beliefs have been found across parents of all races, studies reveal that Black parents tend to believe that using CP is effective to teach their children about respecting others, preventing future harmful consequences, and helping their children survive in a racist society (Duong et al., 2022; Taylor et al., 2011b; Thomas & Dettlaff, 2011). For example, commonly reported themes include (a) the use of CP to address transgressions related to a child's disrespectful behaviors; (b) the belief that CP cultivates the value of respect in their children's minds, which has long-term benefits not only to their children, their families, but also society; (c) the belief that without CP to correct misbehaviors, children may engage in delinquent activities (Taylor et al., 2011b), and (d) the attribution that CP is an explanatory factor for their children not being among "those shooting boys at schools" (Duong et al., 2022, p. 1417). A related common perception is that CP protects Black children against hostile interactions with law

enforcement agencies. These expectations may suggest a coping mechanism to ensure successful survival within the historical context of pervasive racism surrounding their lives (Thomas & Dettlaff, 2011). Hence, some Black parents report that they feel distrustful of parenting classes that promote non-physical discipline tactics and consider these tactics as White people's way to raise children, which they do not identify as part of their Black parenting culture (Duong et al., 2022; Klevens et al., 2019).

Studies show that parents are often aware of non-physical discipline strategies that do not involve force (Duong et al., 2021; Straus & Fauchier, 2007; Socolar, 1997). Even so, they report a low level of self-efficacy and response efficacy regarding adopting non-physical discipline strategies. For example, some Black parents report that they use timeout, take things away, and force children to write chunks of text (Duong et al., 2021; Klevens et al., 2019). Nevertheless, they also observe that these non-physical discipline strategies tend not to work as they expected and thus, they report that they would still apply CP when these strategies fail (Duong et al., 2021). These parents also perceive that they do not have sufficient resources to implement certain non-physical discipline strategies (e.g., providing tangible rewards, Duong et al., 2021). Thus, they likely maintain positive attitudes toward CP when they believe that their ability and available resources to adopt non-physical discipline strategies are limited (i.e., self-efficacy) and that non-physical discipline strategies are less effective than CP to achieve the expected behavioral outcomes (i.e., response efficacy). Both self-efficacy and response efficacy of non-physical discipline strategies have been found to predict attitudes toward CP (Duong, 2022). Based on this literature, we predict:

H2a: Outcome expectancies will be positively associated with attitudes toward CP.

H2b: Self-efficacy of non-physical discipline strategies will be negatively associated with attitudes toward CP.

H2c: Response efficacy of non-physical discipline strategies will be negatively associated with attitudes toward CP.

The Moderating Role of Valence of Childhood Experiences

While several studies provide support for the intergenerational hypothesis that a history of CP predicts the continuation of CP in the future (Muller et al., 1995; Niu et al., 2018; Widom & Wilson, 2015), researchers note that not all parents who reported childhood experiences of CP adopt CP when they become parents (Duong & Sirohi, 2023; Klevens et al., 2019). Qualitative evidence shows that a possible explanation is that parents differ in their evaluations of their experiences of CP during their childhood (Duong et al., 2022). More specifically, while some parents report that despite being frequently hit by their parents, they still view CP as unharmed to their wellbeing, which leads to parents perceiving that their direct childhood experiences of CP were positive regardless of the CP frequency administered by their own parents. On the contrary, other parents may hold a negative view of their direct experiences of CP when recalling such childhood events. For these parents, it is likely that even a limited amount of CP suffered during childhood may still trigger hurtful childhood memories, perceived harm, and interpersonal harm aversion (Decety & Cowell, 2017). According to the TPB (Ajzen, 2011), positive or negative feelings attached to a past behavior is referred to as the valence of the behavior. In this study, we define the valence of childhood experiences of CP (hereafter, CP valence) as the degree to which parents report their childhood experiences of CP as emotionally and physically hurtful to them. It is likely that parents who report negative CP experiences will not endorse CP, view CP outcomes negatively, and therefore be more open to learning and using non-physical discipline strategies as alternatives to CP. Based on the literature reviewed herein, we posit that self-efficacy and response efficacy of non-physical discipline strategies, and CP outcome expectancies, will mediate the association between CP frequency and attitudes toward CP.

Further, we predict that CP valence functions as a moderating factor conditioning these indirect associations. Specifically, we hypothesize:

H3: CP frequency will have indirect and positive associations with attitudes toward CP as mediated by (a) outcome expectancies, (b) self-efficacy of non-physical discipline strategies, and (c) response efficacy of non-physical discipline strategies.

These associations will be significant among participants who report no negative CP valence, and not among those who report negative CP valence.

Methods

Participants and Procedure

This study was part of a larger online experiment examining Black parents' perceptions and attitudes toward corporal punishment. Inclusion criteria were Black parents in the U.S. who were living with at least one child younger than 11 years of age. Data were collected by Toluna through its online survey panels (www.toluna-group.com), which include a network of partners with exclusive and deep relationships, which include traditional access panels, co-branded panels, or opt-in databases of individuals throughout the U.S. who agreed to complete research projects and also undertake non-market research activities for payment. Toluna sent a survey link that hosted a questionnaire to potential participants over the course of seven weeks during June and July 2022. Eligible participants, who met inclusion criteria and agreed with the informed consent, participated in the survey. Participants first reported their demographics, CP frequency, CP valence, and outcome expectancies at the pre-test stage. Participants responded to a questionnaire that included scales measuring self-efficacy, response efficacy, and attitudes toward CP at the post-test stage. Attention check items were included in the questionnaire to ensure participants' attention. Each participant was paid approximately \$4 for their time. No personal identifiers of participants were collected. The research protocol received ethical approval from the University's Institutional Review Board.

A total of 963 participants consented and completed the study. After data cleaning (removing participants who had incomplete responses, same response patterns, and failed attention check items), the working sample included 394 Black parents whose age ranged between 18 and 78 years ($M = 38$; $SD = 11.7$). The majority reported low annual household income (75.9% earned below \$60,000). Participants on average reported having two children whose average age was 6 years old. More participants reported having only boys (42.4%) compared to those who reported having only girls (32.2%), and those who had both boys and girls (25.4%). Table 1 reported participants' profiles.

[Table 1]

Measures

Corporal Punishment Frequency. CP frequency was assessed by five items asking participants to report how often they were physically punished by their own parents (Fauchier & Straus, 2010). The reference time for these behaviors was when participants were 6 to 10 years old to ensure participants' ability to recall the events (Fleming & Borrego, 2019). A sample item was “*How often did your parents spank, slap, smack, kick, or swat you?(1-never; 5-very often)*”.

Corporal Punishment Valence. CP valence was operationalized as the degree to which participants felt that their childhood experiences of CP was physically and emotionally hurtful to them: “*To what extent do you think your parents' use of physical discipline emotionally hurt you?*” and “*To what extent do you think your parents' use of physical discipline physically hurt you?*” (1-not at all; 5-very hurtful).

Outcome Expectancies. Informed by the literature on Black parents' perceptions of CP and outcomes (Duong et al., 2022; Klevens et al., 2019; Taylor et al., 2011a), a scale was developed to assess outcome expectancies using three items assessing the extent to which participants believe in the positive outcomes of CP for Black children, A sample item was “*I*

believe using physical discipline measures (spanking/slapping/popping) will help Black children to learn about respecting others” (1-strongly disagree; 5-strongly agree).

Perceived Efficacy of Non-physical Discipline Strategies. Based on prior research (Duong, 2022), self-efficacy was assessed using two items (e.g., “*I am confident I can use non-physical disciplines to correct my child's misbehavior, even when he/she keep ignoring me,*” 1-strongly disagree; 5-strongly agree), while response efficacy was measured using three items (e.g., “*I believe that non-physical types of discipline work well to correct my child's misbehavior,*” 1-strongly disagree; 5-strongly agree).

Attitudes toward CP. Attitudes were assessed with 10 items adopted from the Attitudes Toward Spanking Scale (ATS, Holden, 2001). Sample items were “*Sometimes, a spank and/or a slap is the best way to get a child to listen*” and “*When all is said and done, spanking and/or slapping is harmful for a child (recode)*” (1-strongly disagree; 5-strongly agree).

Covariates. Research has established influential factors affecting efficacy perceptions and attitudes in the CP context, including psychological stress (Bandura, 1977; Holden et al., 2014; Straus, 2001), perceived racism (Thomas & Dettlaff, 2011), and religiosity (Wolf & Kepple, 2019). Parents' gender, age, race, education, religious affiliation, and household income, child aggressive behavior, child's gender and age were also found to affect parents' consideration of using CP (Baniamin, 2022; Gagné et al., 2007; Gershoff et al., 2017; Mehlhausen-Hassoen, 2021). Thus, these variables were measured as covariates.

Data Analysis

Analyses were conducted using SPSS 27 and Mplus 8.4. Descriptive statistics and bivariate correlations of variables were computed. Data showed that exposure conditions did not affect the three outcome variables measured at post-test (i.e., ANOVA results revealed no differences between the experimental conditions regarding self-efficacy ($F(6,387) = 1.004; p$

= .42), response efficacy ($F(6,387) = .286; p = .94$), and attitudes ($F(6,387) = 1.576; p = .15$). A confirmatory factor analysis (CFA) was performed to validate the measurements. Structural equation modeling (SEM) with maximum likelihood estimation was conducted to test the moderated-mediation model (Edwards & Lambert, 2007). The indices of comparative fit index ($CFI \geq .90$), Tucker-Lewis index ($TLI \geq .90$), root mean square error of approximation ($RMSEA \leq .08$), and standardized root mean square residual ($SRMR \leq .08$) were used to assess model fit (Hu & Bentler, 1999). All variables were standardized to minimize multicollinearity. All covariates plus the experimental conditions were included as control variables in the model test. Bootstrapping methods using 5,000 replications of samples were used to calculate the results. Parameter estimates were statistically significant when the 95% confidence intervals (CI) did not include zero (Hayes, 2017).

Results

As shown in *Table 2*, most correlations between key variables were significant (coefficients were between .11 and .65). The directions of the correlations were as expected. Specifically, reported CP experience frequency was positively correlated with positive outcome expectancies ($r = .31$) and attitudes ($r = .29$), while negatively correlated with response efficacy of non-physical discipline strategies ($r = -.15$). Favorable CP outcome expectancies were negatively correlated with self-efficacy ($r = -.27$) and response efficacy of non-physical discipline strategies ($r = -.39$), while having a positive correlation with positive CP attitudes ($r = .65$). Finally, both self-efficacy and response efficacy of non-physical discipline strategies were negatively correlated with attitudes ($r = -.55$ and $r = -.44$, respectively). Additionally, reliability results indicated acceptable and satisfactory internal consistency. The CFA results validated the measures used in this study: $\chi^2(260) = 616.815, p < .001$; $CFI = .95$, $TLI = .95$, $RMSEA = .06$, $SRMR = .04$. As shown in *Table 3*, factor loadings of most scale items were all above .70, which met the robust factor loading criterion

(a cut-off value of .70, Hair et al., 2010). Only two items showed factor loadings of less than .70, but still above .60 (one item in the CP frequency scale and one item in the ATS scale). Based on prior methodological guidance and practice (Awang, 2014), the two items were retained in the analysis.

[Table 2 & 3]

The SEM results testing the moderated-mediation model showed an acceptable model fit with the data: $\chi^2(5) = 9.508, p = .46$; CFI = .99, TLI = .93, RMSEA = .04, SRMR = .01.

H1 predicted that participants who reported higher CP frequency would report higher outcome expectancies (*H1a*), lower perceptions of self-efficacy of non-physical discipline strategies (*H1b*), and lower perceptions of response efficacy of non-physical discipline strategies (*H1c*). Data showed support for *H1a* ($\beta = .62, SE = .12, 95\% CI: .519, .993$), *H1b* ($\beta = -.47, SE = .14, 95\% CI: -.697, -.246$) and *H1c* ($\beta = -.76, SE = .12, 95\% CI: -.906, -.525$).

H2 posited that outcome expectancies positively predicted attitudes toward CP (*H2a*), while self-efficacy and response efficacy of non-physical discipline strategies negatively predicted attitudes (*H2b-c*). Results supported *H2a* ($\beta = .48, SE = .05, 95\% CI: .358, .493$), *H2b* ($\beta = -.13, SE = .04, 95\% CI: -.219, -.067$), and *H2c* ($\beta = -.27, SE = .05, 95\% CI: -.394, -.223$). *H3* posited that CP frequency would indirectly and positively predict attitudes toward CP, mediated by outcome expectancies (*H3a*), self-efficacy of non-physical discipline strategies (*H3b*), and response efficacy of non-physical discipline strategies (*H3c*), and that these association would not be significant among participants who reported negative CP valence. Results showed that *H3a* was not supported because the indirect association between CP frequency and attitudes through outcome expectancies remained significant at all three levels of CP valence (not hurtful: $\beta = .28, SE = .05, p < .001$, slightly hurtful: $\beta = .23, SE = .04, p < .001$, and very hurtful: $\beta = .19, SE = .04, p < .001$). However, data supported *H3b* as the indirect association between CP frequency and attitudes through self-efficacy was

significant when CP valence was reported as not hurtful or slightly hurtful ($\beta = .05$, $SE = .02$, $p < .05$, and $\beta = .03$, $SE = .02$, $p < .001$, respectively). The association was no longer significant when CP valence was reported as very hurtful ($\beta = .02$, $SE = .01$, $p = .17$). Similarly, data supported *H4c* by indicating that the indirect association between CP frequency and attitudes through response efficacy was significant when CP valence was reported as not hurtful or slightly hurtful ($\beta = .17$, $SE = .04$, $p < .001$, and $\beta = .10$, $SE = .03$, $p < .001$, respectively). When CP valence was reported as very hurtful, this indirect association became nonsignificant ($\beta = .03$, $SE = .02$, $p = .16$).

Discussion

Direct experiences of CP during childhood have been found to influence current attitudes toward CP, which creates and perpetuates the cycle of violence in families (Berlin et al., 2011; Muller et al., 1995; Widom & Wilson, 2015). However, few studies have examined mechanisms that characterize the link between CP frequency and the formation of attitudes supporting CP. Additionally, few studies have considered perceived efficacy of non-physical discipline measures and the role of CP valence in this context. Thus, the current research tests a moderated-mediation model hypothesizing the inter-relationships among CP frequency and CP valence, outcome expectancies, self-efficacy and response efficacy of non-physical discipline strategies, and attitudes toward CP.

Results show support for most of the study's hypotheses. Specifically, the more frequently participants were physically punished during their childhood, the more they perceive that the outcomes of CP would be beneficial, the less they perceive their ability to implement non-physical discipline strategies, and the less they perceive that using non-physical disciplinary strategies would be effective. These findings are consistent with prior studies showing that Black parents often talked about CP administered by their own parents

as an effective approach to control them and to train them to be ready for future adverse events (Duong et al., 2022; Paschall et al., 2003; Simons et al., 1993; Taylor et al., 2011a).

Results indicate that participants expecting that CP would result in positive outcomes tend to report more positive attitudes toward CP. Additionally, participants who report lower perceptions of ability to conduct non-physical discipline strategies and lower perceptions of the effectiveness of non-physical discipline strategies hold more positive attitudes toward CP. These findings are consistent with theories about the behavioral beliefs underpinning the formation of attitudes (Fishbein & Ajzen, 2011). That is, people's expectations of the outcomes of a behavior shape their overall evaluation of the behavior to form attitudes toward the behavior. When CP is regarded as beneficial and effective, alternative non-physical discipline strategies are unlikely to be considered as replacements despite parents' awareness of available non-physical discipline options (Duong et al., 2021; Klevens et al., 2019). Thus, low perceived efficacy of non-physical discipline strategies likely reinforces parents' positive attitudes toward CP as found in the current study. These findings suggest that low perceived efficacy can be a risk factor contributing to forming positive attitudes toward CP.

The moderated-mediation results indicate that the indirect associations between CP frequency and attitudes through self-efficacy and response efficacy of alternative discipline strategies are significant among participants who report CP valence as not hurtful or slightly hurtful. These associations are absent among participant who view their CP experiences as very hurtful. These results suggest that the influence of CP frequency on attitudes through efficacy pathways depends on the degree to which participants evaluate how they feel about their own CP experiences. Thus, the incorporation of CP valence in the model helps to establish a boundary condition to theorize the association between CP frequency and attitudes through efficacy mediating mechanisms. Additionally, moderated-mediation results show that outcome expectancies remain a significant mediating mechanism linking CP frequency and

attitudes independent of the levels of CP valence. This finding lends support to the powerful role of outcome expectancies in shaping positive attitudes toward CP. This is consistent with prior studies revealing that parents overwhelmingly accept that if CP works for them even when their own parents repeatedly punished them, they would endorse the use of CP as an effective way to teach children to behave (Chiocca et al., 2017; Holden, 2020; Niu et al., 2018). As such, results indicate the need to persuade parents to change the way they perceive CP outcomes via continuing to educate them about the harmful effects of CP, providing evidence-based information about the effectiveness of non-physical child management strategies, and providing early normative opportunities for successfully using effective child behavior management strategies.

Limitations and Implications

Several limitations should be noted in the current study. First, this study used cross-sectional survey data and thus, it could not confirm a causal relationship between the independent and dependent variables nor was the study designed for testing of cause or causal reversal. Second, the relatively small sample ($N = 394$), although yielding sufficient power, was not representative and findings may not be generalized at the population level. Third, measures relied on parent-reported data, which may result in biased information due to social desirability. Fourth, this study did not ask participants to report their living locations (i.e., states) and so, interpretations of results relating to regions were limited. Finally, the majority of parent respondents were mothers (67%) and therefore, findings might be more reflective of mothers as compared to fathers. Future research may benefit from the use of a prospective, longitudinal design. Future studies should also consider recruiting a more gender-balanced sample to enhance generalizability.

While this study sample does not represent the likely diversity of views within the general population of Black parents living in the U.S. with children, it is sufficiently powered

to test the hypothesized model. Within social welfare and psychology research, our approach to data collection was unique in that the online survey approach used a network of partners and databases of individuals throughout the U.S. who anonymously expressed interest in nonmarket research activities. This was in contrast with several prior studies relying on samples recruited within education, social welfare, psychological, or medical settings in which participants, particularly Black parents, have been historically harmed. Moreover, given the fundamental lack of research centered on the perspectives of Black parents to inform culturally relevant, acceptable, and evidence-based approaches to optimizing parent practices, this study also represented an attempt to avoid the issue of minority racial and ethnic groups being lumped together to compared with White samples, resulting in data that are illusive and not useful to inform interventions for the minority groups (Bent-Goodley, 2021; Fontes, 1995).

Findings hold important theoretical and practical implications for informing interventions aimed at reducing parent use of CP. Theoretically, we found empirical support for the predictions that outcome expectancies and perceived efficacy serving as mediating mechanisms explaining how CP frequency might shape attitudes toward CP among Black parents. Public health research has established the need for behavioral change messages to target attitudinal change toward an unhealthy behavior while simultaneously promoting efficacy perceptions of alternative healthy behaviors (Fishbein & Cappella, 2006; Fishbein & Yzer, 2003). Research about CP has also found evidence consistent with this perspective (Duong et al., 2021; Rodriguez et al., 2018; Taylor et al., 2017). These cognitive mechanisms provide potentially interesting research direction that has not been adequately explored. Additionally, findings related to the moderating role of CP valence revealed a boundary condition in which some parents who frequently received harsh punishments during their own childhood go on viewing CP strategies as effective, while others consider them as ineffective,

thereby likely attenuating the relationship between CP frequency in childhood and favorable endorsement of CP. Results related to the role of CP valence also suggested the need for closer examination of how parents frame their own childhood CP experiences to evaluate whether the experience was hurtful to them.

Continued research examining CP frequency and valence can help unravel their interactive relationships to reveal more insights helping practitioners to design and tailor prevention messages and intervention efforts. Currently, there is a virtual absence of clinical research that examines experimental manipulation of effective messaging, which clinicians can apply. Practical findings point to the need for future clinical research that can inform clinicians about effective messaging strategies they can use not only to underscore problematic outcomes of CP based on scientific research (for example, see Holden et al., 2014), but also for embedding culturally relevant educational information about positive parenting techniques.

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Table 1.*Demographics*

		<i>N</i>	(%)
Sex	Male	130	33
	Female	264	67
Marital Status	Single	113	28.7
	Married	193	49
	Never Married	21	5.3
	Previously Married	67	17
Education	Grade School	17	4.3
	Some High School	30	7.6
	Completed High School	72	18.3
	Some College or Technical School	149	37.8
	Completed 4 years of college	74	18.8
	Some Graduate Education	27	6.9
	Completed Graduate Education	25	6.3
Income	0 – 2,999	18	4.6
	3,000 – 7,999	25	6.3
	8,000 – 12,999	14	3.6
	13,000 – 19,999	32	8.1
	20,000 – 29,999	56	14.2
	30,000 – 39,999	39	9.9
	40,000 – 49,999	55	14
	50,000 – 59,999	60	15.2
	60,000 – 70,000	37	9.4
	Over 70,000	58	14.7
Religion	Protestant	36	9.1
	Roman Catholic	28	7.1
	Mormon	11	2.8
	Orthodox	3	.8
	Jewish	19	4.8
	Muslim	20	5.1
	Buddhism	12	3
	Christian	150	38.1
	Baptist	38	9.6
	Atheist	7	1.8
	Lutheran	18	4.6
	Other	9	2.3
	None	43	10.9
Child Gender	Only boys	167	42.4
	Only Girls	127	32.2
	Both Boys and Girls	100	25.4

Living Situation	Single Parent	99	25.1
	Married and living with a partner who's the child's parent	183	46.4
	Married to a partner who's not the child's parents	52	13.2
	Not married and living with a partner who's the child's parent	26	6.6
	Not married and living a partner who is not the child's parent	12	3
	Other living situation	22	5.6

Table 2.*Bivariate correlations, descriptive statistics, and internal consistency*

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CEF													
2. CEV	.56*												
3. OEXP	.31**	-.02											
4. SE	-.03	.18**	-.27**										
5. RE	-.15**	.11*	-.39**	.65**									
6. ATS	.29**	-.08	.65**	-.55**	-.44**								
7. CAB	.41**	.36**	.35**	.00	-.13*	.22**							
8. REL	.13**	.07	.18**	.03	.03	.17**	.19**						
9. PRACE	.41**	.30**	.20**	.03	-.12*	.19**	.45**	.13**					
10. Stress	.38**	.38**	.16**	-.03	-.13**	.19**	.53**	-.06	.44**				
11. PA	-.07	-.15**	.01	-.15**	-.08	.06	-.22**	.09	-.10*	-.27**			
12. CA	-.01	-.01	.01	-.05	-.02	-.01	-.05	.17**	-.06	-.09	.25**		
13. Income	-.05	.01	.00	-.01	-.01	-.03	.13*	.19**	.05	-.03	.00	.15**	
Mean	2.40	2.56	2.55	3.75	3.79	3.81	1.94	2.86	2.63	2.51	38	6	
SD	1.06	1.32	1.29	1.06	.99	1.93	.87	1.09	1.06	1.06	11.7	3.24	
Reliability	.86 (α)	.73 (r)	.89	.69 (r)	.89 (α)	.95 (α)	.86 (α)	.86 (α)	.91 (α)	.88 (α)	-	-	

Note: CEF = CP frequency; CEV = CP valence; OEXP = Outcome expectancies; SE = Self-efficacy; RE = Response efficacy; ATS = Attitudes toward spanking; CAB = Child aggressive behavior; REL = Religiosity; PRACE = Perceived racism; PA = Parent's age; CA = Child's age. All correlations for measure reliability were significant ($p < .01$).

* $p < .05$, ** $p < .01$.

Table 3.
Factor loadings of key measures

Variable	Items	Factor Loading
Frequency of CP during childhood	How often did your parents spank, slap, smack, kick, or swat you?	.75
	How often did your parents use a tree branch, belt, wooden spoon or other objects to hit you?	.77
	How often did your parents throw flip-flops, tools, or other any objects at you when they were angry with your misbehavior?	.78
	How often did you parents pinch your ear or shove your head when you misbehaved?	.74
	How often did your parents ask you to do push-up or put books on your head as a form of punishment?	.63
Valence of CP Experience	To what extent do you think your parents' use of physical discipline physically hurt you?	.90
	To what extent do you think your parents' use of physical discipline emotionally hurt you?	.82
Outcome Expectancy	I believe using physical discipline measures (spanking/slapping/popping, etc.) will help Black children to learn about respecting others	.89
	I believe using physical discipline measures will prevent Black children from having future problems (drug use, violence, delinquency, etc.)	.84
	I believe using physical discipline measures will train Black children to prepare well for the harsh reality in our society.	.84
Self-efficacy	I believe I can always use non-physical disciplines to correct my child's misbehavior, even when his/her misbehavior is serious	.84
	I am confident I can use non-physical disciplines to correct my child's misbehavior, even when he/she keep ignoring me	.82
Response efficacy	I believe that non-physical forms of discipline are very effective in correcting my child's misbehavior	.87
	I believe that non-physical types of discipline work well to correct my child's misbehavior	.82
	I believe that non-physical disciplines are very effective at preventing my child's misbehavior	.86
Attitudes	Overall, I believe spanking and/or a slapping is a good disciplinary technique	.86
	Spanking and/or slapping a child is a normal part of parenting	.86

Sometimes, a spank and/or a slap is the best way to get a child to listen	.87
A spank and/or a slap is an effective method to change a child's behavior for the long term	.88
Sometimes, spanking and/or slapping is necessary to instill proper moral and social conduct	.86
Sometimes, the only way to get a child to behave is with a spank and/or a slap	.78
One of the best ways for a child to learn "no" is to spank and/or a slap him/her after disobedience	.66
If a child is spanked and/or a slapped for a misbehavior, he or she should always be spanked/slapped for that misbehavior	.90
When all is said and done, spanking and/or a slapping is beneficial for a child	.78
I believe it is the parent's right to spank and/or to slap their children if they think it is necessary	.92

Note. All factor loadings are significant at $p < .001$.